

REMARKS / ARGUMENTS

Applicant submits this Amendment and Response in response to the Office action mailed July 23, 2004. In the Office action mailed July 23, 2004, claims 1-29 were rejected by the Examiner. Because, as discussed below, the prior art references relied upon do not teach or suggest all of the claim limitations, Applicant respectfully traverses the Examiner's rejections. See M.P.E.P. § 706.02(j). Claims 1,2 and 4-29 are currently pending in this application.

Rejections Under 35 U.S.C. § 102(e)

In the Office action mailed July 23, 2004, the Examiner rejected Claims 1-3 under 35 U.S.C. § 102(e) as being anticipated by Murphy.

Independent Claim 1 was amended to show that the geographic information recorded by the geographic positioning receiver at the time the digital images were recorded is determined by matching the time that geographic information was recorded with the time that a digital image was recorded. This is not shown or suggested by Murphy. Murphy discloses a processing unit **140** which provides an index number N which is recorded along with the location data L, image data I, and in some instances time data T. See, Col. 9, ll. 52-54 ("Means *may* also be provided for recording the time, T_i, of the capture of the image") (emphasis added). A play back unit **104** downloads the position, image and time data that is associated with the index number N. Col. 9, l. 62 – Col. 10, l. 5. Thus, Murphy matches the image data with the geographic data via index number N, rather than via the time that the respective data were recorded.

The Examiner rejected independent Claim 2 based on the disclosure of Murphy column 10, lines 1-5. Dependent Claim 2 depends from independent Claim 1. As such,

it is respectfully submitted that the basis for rejection to pending dependent Claim 2 has been obviated in light of the amendment made to independent Claim 1. In addition, Murphy does not disclose a digital image recording device capable of automatically recording a first relative time when the digital image recording device records an image as claimed in Claim 2. Rather, Murphy discloses a recording unit **102** which includes the image recorder IRD **180** and the geographic position recorder GPDR **130** (col. 8, ll. 44-55), and which *may* also include means for recording the time T_i (col. 9, ll. 45, 52-54). Thus unlike Claim 2, the means for recording the time T_i is not an essential feature of Murphy.

Dependent Claim 3 has been canceled. However, this cancellation is not an admission that Claim 3 was unpatentable in light of the prior art cited by the Examiner. Also, this cancellation should not be considered an agreement with the Examiner regarding the characterization of the cited prior art of the Office Action. Applicant canceled the rejected claim to expedite the issuance of a patent on this pending application.

Rejections Under 35 U.S.C. § 103

In the Office action mailed July 23, 2004, the Examiner also rejected Claims 4-29 under 35 U.S.C. § 103 as being unpatentable over Murphy in view of Milnes.

The Examiner rejected dependent Claims 4 and 15 contending that Milnes discloses determining a time offset between the first time that at least one digital image was recorded and the time geographic information was recorded (hereafter "Time Offset"), directing Applicant to Figure 14 step 540, and ¶ 0176, and that Murphy discloses the balance of the limitations. Applicant respectfully submits that the

Examiner's reliance on Milnes is mistaken. Step 540 of Figure 14 states, "Tsync receives packet from GPS receiver, records PC time and computes offset." This describes determining an offset between the time the GPS packet is received by Tsync (PC time) and the time it was sent from the GPS receiver (the 1 Hz pulse signal sent at the top of every second). ¶ 0176. Milnes does not disclose determining a time offset between the times the digital image and the geographic data were recorded.

The Examiner rejected dependent Claim 5 relying on the disclosure in Murphy Figure 1 and column 1, line 65 – column 2, line 8. However, rather than disclosing a method for determining a Time Offset using a digital image recording device to record an image of the visual display of a geographic positioning receiver, these references merely discuss U.S. Patent No. 5,296,884 to Honda which discloses a data recording camera that allows for the display of images corresponding to a selected place and/or time and date data. Neither Murphy nor Honda suggest using a digital recorder to record an image of a geographic position recorder. Applicant also traverses the Examiner's rejection by incorporating by reference the arguments made regarding Claims 4 and 15.

The Examiner rejected dependent Claims 6, 7, 16 and 19 under principles of inherency, contending that Milnes discloses determining a Time Offset by using an image of a UTC display recorded with the image recording device, because "inherently GPS uses a UTC for synchronizing the clock and consequently to determine the offset." First, Applicant incorporates by reference arguments made regarding Claims 4 and 15. Second, while Applicant agrees that GPS receivers "are capable of providing and/or displaying ... the precise world standard date and time" (Burgess at p. 2, lines 20-22), GPS receivers do not inherently determine the time offset between the times the digital image and the

geographic information was recorded. “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 U.S.P.Q.2d (BNA) 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). Also, “the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.” *In re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d (BNA) 1949, 1950-51 (Fed. Cir. 1999) (citation omitted). The Examiner has not shown that Milnes discloses expressly or inherently using a digital image recorder to record an image of the UTC display of a geographic position recorder, more less inherently using the image to either determine a Time Offset, or to synchronize the clock of the digital image recorder with the geographic positioning receiver’s clock or world standard time.

Dependent Claims 8 and 28 were rejected by the Examiner based on the disclosure of Milnes ¶ 0175. Applicant respectfully submits that the Examiner is mistaken. First, with respect to Claim 8, Applicant incorporates by reference arguments made regarding Claims 4 and 15 in that Milnes does not disclose determining a Time Offset. Second, as to both Claims 8 and 28, Milnes ¶ 0175 states that the Race computer 504 “smoothes small gaps in data via interpolation.” However, Race computer does not receive data from the GPS receiver 536. Fig. 13; ¶ 0170. Thus, Race computer does not, and cannot, interpolate GPS data as claimed in Claims 8 and 28.

The Examiner rejected dependent Claim 9 contending that Milnes ¶ 0176 discloses synchronizing the image recording device’s clock data with the GPS receiver’s

clock data. Dependent Claim 9 depends on independent Claim 1. As such, it is respectfully submitted that the basis for rejection to pending dependent Claim 9 has been obviated in light of the amendment made to independent Claim 1. In addition, ¶ 0176 describes synchronizing or matching the time associated with image data file, or VITC, received by Tsync, *see*, ¶ 0176 (“Tsync 534 is also reading VITC data from the VITC reader 535”), to the time associated with the GPS data file received by Tsync, *see*, ¶ 0176 (“GPS receiver 536 outputs the GPS time to Tsync 534 via an RS line 422 once per second.”). Milnes does not disclose or suggest synchronizing the clock data internal to the digital image recorder to the clock data internal to the geographic position recorder.

Independent Claim 10 was rejected by the Examiner by relying on the basis for the rejection of Claim 1 and by contending that Milnes ¶ 0238 discloses outputting a result representing a closest pairing of each said one or more images with a respective information. First, similar to Claim 1, independent Claim 10 was amended to show that the geographic information recorded by the geographic positioning receiver at the time the digital images were recorded is determined by matching the time that geographic information was recorded with the time that a digital image was recorded. This is not shown or suggested by Murphy which discloses down loading the position, image, and in some instances the time data, associated with an index number N. The arguments made in connection with amending Claim 1 are therefore incorporated herein by reference. Second, Milnes ¶ 0238 does not disclose outputting a result which represents the closest pairing of an image with respective information including geographic information. Milnes ¶ 0238 merely discloses a process for providing virtual cars to blend into a video using pre-rendered images of such cars. The disclosed process includes the step of

looking for the closest pair of pre-rendered images and interpolating between the two. The interpolated image is then blended into the video image. Third, Claim 10 was amended to further show that, unlike Milnes, the instant invention describes a method that does not need to be performed substantially close in time to the recordation of the respective image, geographic, and when applicable, other data. The instant invention may be performed at a substantially later time than these events. Milnes, on the other hand, describes a system of interconnected and related devices used to acquire statistics about an object during an event, such as an automobile race, for use during the event.

The Examiner rejected Claims 11-14, 23-24 and 28 which depend from independent Claim 10. As such, it is respectfully submitted that the bases for rejections to pending dependent Claims 11-14, 23-24 and 28 have been obviated in light of the amendment made to independent Claim 10.

Dependent Claims 17, 18 and 20 were rejected by the Examiner based on the disclosure of Milnes Figure 14. Applicant incorporates by reference the arguments made in traversing the rejections to Claims 4 and 15 which show that the only time offset calculated in Milnes is the difference between the time the GPS packet is received by Tsync (PC time) and the time it was sent from the GPS receiver (the 1 Hz pulse signal sent at the top of every second). Figure 14, step 540; ¶ 0176. Milnes discloses neither determining an offset of the image recording device's clock time (as claimed in Claim 17), determining an offset of the time each image was created with respect to world standard time (as claimed in Claim 18), nor recording over time multiple measurements of an image-recording device's clock time offset (as claimed in Claim 20).

The Examiner rejected dependent Claim 21 based on the disclosure of Milnes ¶ 0176. Burgess describes the “calibration image” as containing “the actual UTC time as displayed on a UTC clock, such as the time presented on the web site www.time.gov” or containing “a picture of a local time display synchronized to the UTC time, such as the UTC time presented on the display of a GPS receiver.” Burgess at p. 14, ll. 18-22. Milnes does not disclose such an image. Milnes ¶ 0176 describes synchronizing or matching the time associated with image data file VITC received by Tsync, *see*, ¶ 0176 (“Tsync 534 is also reading VITC data from the VITC reader 535”), to the time associated with the GPS data file received by Tsync. *See*, ¶ 0176 (“GPS receiver 536 outputs the GPS time to Tsync 534 via an RS line 422 once per second.”). Milnes does not disclose or even suggest using an image recorded by the digital image recorder to calibrate or calculate a time offset.

The Examiner also rejected dependent Claim 22, contending that the disclosure of Milnes Figure 11 teaches a step of performing optical character recognition. First, Claim 22 depends from Claim 15 whose rejection was traversed above. As such, it is respectfully submitted that the basis for rejection to pending dependent Claim 22 has been obviated in light of the arguments made in connection with independent Claim 15. Second, Milnes Figure 11 discloses the use of a camera 392 with camera sensors 390. *See*, ¶ 0162. The camera sensors are described as including “optical shaft encoders, fiber optic gyros, inclinometers, and reading voltages from the lens... .” Optical character recognition technology was not disclosed. Assuming *arguendo* that it was disclosed, Milnes does not teach that such technology could be used to calibrate or calculate a time offset.

The Examiner did not support his rejection of dependent Claim 25 with any disclosures in the prior art as required. 35 U.S.C. § 132; 37 C.F.R. 1.104 ("In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable."); M.P.E.P. § 706.02(j) ("the examiner should set forth ... (A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate, [and] (B) the [differences] in the claim over the applied reference(s)"). Therefore, Applicant is unable to address the rejection.

Dependent Claim 26 was rejected by the Examiner based on the disclosure of Milnes ¶ 0221. Claim 26 depends from Claim 25 and claims the use of a location indicator to tag digital images, wherein the location indicator, *i.e.* a GPS epoch (Burgess at p. 6, ll. 7-8), is configured for insertion into an image file. However, Milnes ¶ 0221 only describes how to transform a three-dimensional location of an object already known by the system based on GPS technology into a two-dimensional position which is then inserted into the video. Thus, Milnes does not disclose this claim limitation.

Finally, the Examiner rejected independent Claim 29 contending, by referring to his rejection of Claim 25, that either Murphy or Milnes disclose position tagging each image with a location indicator of said geographic data substantially closest in time to when each image was recorded. Because the Examiner failed to set forth a basis for his rejection of Claim 25, Applicant is also unable to address this rejection. However, in an

attempt to do so, Applicant incorporates by reference the arguments made in traversing Claim 26.

Lastly, Claims 6, 9 and 16-22 have been amended to correct minor editorial problems, *i.e.* changing “an” to “a” (Claim 6), “steps” to the singular “step” (Claim 9), and “or” to “of” (Claims 16-22).

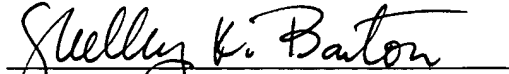
Applicant has shown that the prior art references relied upon by the Examiner do not teach or suggest all of the limitations of the respective claims. *See Atlas Powder Co. v. IRECO Inc.*, 190 F.3d 1342, 1346 (Fed. Cir. 1999) (anticipation); *Sibia Neurosciences, Inc. v. Cadus Pharm.Corp.*, 225 F.3d 1349, 1356 (Fed. Cir. 2000) (obviousness); M.P.E.P. § 706.02(j) (obviousness). Thus, it is believed that the present Amendment addresses each of the rejections issued by the Examiner in the present Office action. Applicant respectfully submits that all of the pending Claims 1-2 and 4-29 after this Amendment are allowable, and Applicant respectfully requests an early Notice of Allowability be issued in this case.

If the Examiner has any questions or comments, he is invited to contact Applicant's undersigned representative at the telephone number indicated below. If the payment included with this Amendment (or lack thereof) is insufficient or an overpayment of the fees due, please make up the insufficiency or credit Deposit Account No. 502775 as applicable. This is NOT an authorization to withdraw any issue fee from the Deposit Account.

Application Serial No. 09/900,321
Amendment and Response dated October 14, 2004
Reply to Office Action of July 23, 2004

Respectfully submitted this 14th day of October, 2004.

GREENBERG TRAURIG, LLP

A handwritten signature in cursive script, reading "Shelley K. Barton", written over a horizontal line.

Shelley K. Barton, Esq.

Reg. No. 53,971

1200 Seventeenth Street, Suite 2400

Denver, Colorado 80202

Tel.: 303-572-6500

DEN-SRV01\161159v02\10/14/04\64145.010800